

## Amendments to the Claims

1- 6. (Canceled)

7. (Withdrawn – Currently Amended) A method of treating a condition in a mammal, the treatment of which is effected or facilitated by  $K_v1.5$  inhibition, which comprises administering a compound selected from the group consisting of 7-methoxy-2,3-dimethyl-1-phenyl-2,3-dihydroquinazolin-4(1H)-one; 7-methoxy-2-methyl-4-oxo-1-phenyl-1,4-dihydroquinazolin-1-ium chloride; 2-tert-butyl-7-methoxy-1-phenylquinazolin-4(1H)-one; 2-cyclohexyl-7-methoxy-1-phenylquinazolin-4(1H)-one; and 3-cyclopropyl-7-methoxy-1-phenylquinazoline-2,4(1H,3H)-dione of Claim 1 in an amount that is effective at inhibiting  $K_v1.5$ .

8. (Withdrawn) A method of Claim 7, wherein the condition is cardiac arrhythmia.

9. (Withdrawn) A method of Claim 8, wherein the cardiac arrhythmia is atrial fibrillation.

10. (Withdrawn) A method of Claim 8, wherein the cardiac arrhythmia is selected from the group consisting of atrial flutter, atrial arrhythmia and supraventricular tachycardia.

11. (Withdrawn- Currently Amended) A method of preventing a condition in a mammal, the prevention of which is effected or facilitated by  $K_v1.5$  inhibition, which comprises administering a compound selected from the group consisting of 7-methoxy-2,3-dimethyl-1-phenyl-2,3-dihydroquinazolin-4(1H)-one; 7-methoxy-2-methyl-4-oxo-1-phenyl-1,4-dihydroquinazolin-1-ium chloride; 2-tert-butyl-7-methoxy-1-phenylquinazolin-4(1H)-one; 2-cyclohexyl-7-methoxy-1-phenylquinazolin-4(1H)-one; and 3-cyclopropyl-7-methoxy-1-phenylquinazoline-2,4(1H,3H)-dione of Claim 1 in an amount that is effective at inhibiting  $K_v1.5$ .

12. (Withdrawn) A method of Claim 11, wherein the condition is cardiac arrhythmia.

13. (Withdrawn) A method of Claim 12, wherein the cardiac arrhythmia is atrial fibrillation.

14. (Withdrawn) A method of Claim 12, wherein the cardiac arrhythmia is selected from the group consisting of atrial flutter, atrial arrhythmia and supraventricular tachycardia.

15. (Withdrawn) A method of Claim 11, wherein the condition is a thromboembolic event.

16. (Withdrawn) A method of Claim 15, wherein the thromboembolic event is a stroke.

17. (Withdrawn) A method of Claim 11, wherein the condition is congestive heart failure.

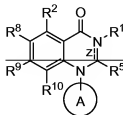
18-20 (Canceled)

20. (Withdrawn- Currently Amended) A method of treating cardiac arrhythmia comprising administering a compound of Claim 4 with a compound selected from one of the classes of compounds consisting of antiarrhythmic agents having Kv1.5 blocking activities, ACE inhibitors, angiotensin II antagonists, cardiac glycosides, L-type calcium channel blockers, T-type calcium channel blockers, selective and nonselective beta blockers, endothelin antagonists, thrombin inhibitors, aspirin, nonselective NSAIDs, warfarin, factor Xa inhibitors, low molecular weight heparin, unfractionated heparin, clopidogrel, ticlopidine, IIb/IIIa receptor antagonists, 5HT receptor antagonists, integrin receptor antagonists, thromboxane receptor antagonists, TAFI inhibitors and P2T receptor antagonists.

21. (Withdrawn -Currently Amended) A method for inducing a condition of normal sinus rhythm in a patient having atrial fibrillation, which comprises treating the patient with a compound of Claim 4.

22. (Withdrawn- Currently Amended) A method for treating tachycardia in a patient which comprises treating the patient with an antitachycardia device in combination with a compound of Claim 4.

23. (Currently Amended) A compound having the formula



wherein

or a pharmaceutically acceptable salt thereof, wherein

z is a single or double bond;

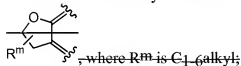
A is an aryl ring, wherein any stable aryl ring atom is independently unsubstituted or substituted with

- 1) halogen;
- 2)  $\text{NO}_2$ ;
- 3)  $\text{CN}$ ;
- 4)  $\text{CR}^{46}=\text{C}(\text{R}^{47}\text{R}^{48})_2$ ;
- 5)  $\text{C}=\text{CR}^{46}$ ;
- 6)  $(\text{CR}^i\text{R}^j)_F\text{OR}^{46}$ ;
- 7)  $(\text{CR}^i\text{R}^j)_FN(\text{R}^{46}\text{R}^{47})$ ;
- 8)  $(\text{CR}^i\text{R}^j)_FC(\text{O})\text{R}^{46}$ ;
- 9)  $(\text{CR}^i\text{R}^j)_FC(\text{O})\text{OR}^{46}$ ;
- 10)  $(\text{CR}^i\text{R}^j)_F\text{R}^{46}$ ;
- 11)  $(\text{CR}^i\text{R}^j)_FS(\text{O})_{0-2}\text{R}^{61}$ ;
- 12)  $(\text{CR}^i\text{R}^j)_FS(\text{O})_{0-2}\text{N}(\text{R}^{46}\text{R}^{47})$ ;
- 13)  $\text{OS}(\text{O})_{0-2}\text{R}^{61}$ ;
- 14)  $\text{N}(\text{R}^{46})\text{C}(\text{O})\text{R}^{47}$ ;
- 15)  $\text{N}(\text{R}^{46})\text{S}(\text{O})_{0-2}\text{R}^{61}$ ;
- 16)  $(\text{CR}^i\text{R}^j)_FN(\text{R}^{46})\text{R}^{61}$ ;
- 17)  $(\text{CR}^i\text{R}^j)_FN(\text{R}^{46})\text{R}^{61}\text{OR}^{47}$ ;
- 18)  $(\text{CR}^i\text{R}^j)_FN(\text{R}^{46})(\text{CR}^k\text{R}^l)_3\text{C}(\text{O})\text{N}(\text{R}^{47}\text{R}^{48})$ ;
- 19)  $\text{N}(\text{R}^{46})(\text{CR}^i\text{R}^j)_F\text{R}^{61}$ ;
- 20)  $\text{N}(\text{R}^{46})(\text{CR}^i\text{R}^j)_FN(\text{R}^{47}\text{R}^{48})$ ;
- 21)  $(\text{CR}^i\text{R}^j)_FC(\text{O})\text{N}(\text{R}^{47}\text{R}^{48})$ , or
- 22) oxo;

$\text{R}^2$ ,  $\text{R}^8$ ,  $\text{R}^9$  and  $\text{R}^{10}$  are independently selected from:

- 1) hydrogen;
- 2) halogen;
- 3)  $\text{NO}_2$ ;
- 4)  $\text{CN}$ ;
- 5)  $\text{CR}^{43}=\text{C}(\text{R}^{44}\text{R}^{45})$ ;
- 6)  $\text{C}\equiv\text{CR}^{43}$ ;
- 7)  $(\text{CR}^{\text{eRf}})_p\text{OR}^{43}$ ;
- 8)  $(\text{CR}^{\text{eRf}})_p\text{N}(\text{R}^{43}\text{R}^{44})$ ;
- 9)  $(\text{CR}^{\text{eRf}})_p\text{C}(\text{O})\text{R}^{43}$ ;
- 10)  $(\text{CR}^{\text{eRf}})_p\text{C}(\text{O})\text{OR}^{43}$ ;
- 11)  $(\text{CR}^{\text{eRf}})_p\text{R}^{43}$ ;
- 12)  $(\text{CR}^{\text{eRf}})_p\text{S}(\text{O})_0\text{R}^{60}$ ;
- 13)  $(\text{CR}^{\text{eRf}})_p\text{S}(\text{O})_0\text{N}(\text{R}^{43}\text{R}^{44})$ ;
- 14)  $\text{OS}(\text{O})_0\text{R}^{60}$ ;
- 15)  $\text{N}(\text{R}^{43})\text{C}(\text{O})\text{R}^{44}$ ;
- 16)  $\text{N}(\text{R}^{43})\text{S}(\text{O})_0\text{R}^{60}$ ;
- 17)  $(\text{CR}^{\text{eRf}})_p\text{N}(\text{R}^{43})\text{R}^{60}$ ;
- 18)  $(\text{CR}^{\text{eRf}})_p\text{N}(\text{R}^{43})\text{R}^{60}\text{OR}^{44}$ ;
- 19)  $(\text{CR}^{\text{eRf}})_p\text{N}(\text{R}^{43})(\text{CR}^{\text{eRh}})_q\text{C}(\text{O})\text{N}(\text{R}^{44}\text{R}^{45})$ ;
- 20)  $\text{N}(\text{R}^{43})(\text{CR}^{\text{eRf}})_p\text{R}^{60}$ ;
- 21)  $\text{N}(\text{R}^{43})(\text{CR}^{\text{eRf}})_p\text{N}(\text{R}^{44}\text{R}^{45})$ ; and
- 22)  $(\text{CR}^{\text{eRf}})_p\text{C}(\text{O})\text{N}(\text{R}^{43}\text{R}^{44})$ ;

or  $\text{R}^2$  and  $\text{R}^8$  are independently as defined above, and  $\text{R}^9$  and  $\text{R}^{10}$ , together with the atoms to which they are attached, form the ring



$\text{R}^1$  is selected from the group consisting of

- 1) hydrogen;
- 2)  $(\text{CR}^{\text{aRb}})_m\text{R}^{40}$
- 3)  $(\text{CR}^{\text{aRb}})_m\text{OR}^{40}$ ;
- 4)  $(\text{CR}^{\text{aRb}})_m\text{N}(\text{R}^{40}\text{R}^{41})$ ;
- 5)  $(\text{CR}^{\text{aRb}})_m\text{N}(\text{R}^{40})\text{C}(\text{O})\text{OR}^{41}$ ;
- 6)  $(\text{CR}^{\text{aRb}})_m\text{N}(\text{R}^{40})(\text{CR}^{\text{eRd}})_2\text{N}(\text{R}^{41})\text{C}(\text{O})\text{R}^{40}$ ;
- 7)  $\text{C}_{3-8}$  cycloalkyl;
- 8)  $(\text{CR}^{\text{aRb}})_m\text{C}(\text{O})\text{OR}^{40}$ ;

- 9)  $(C^aR^b)_nN(R^{40})(C^eR^d)_{1-3}R^{41}$ ;
- 10)  $(C^aR^b)_nS(O)_{0-2}R^6$ ;
- 11)  $(C^aR^b)_nS(O)_{0-2}N(R^{40}R^{41})$ ;
- 12)  $(C^aR^b)_nN(R^{40})R^6OR^{41}$ ;
- 13)  $(C^aR^b)_nN(R^{40})(C^eR^d)_{0-6}C(O)N(R^{41}R^{42})$ ;

or  $R^{11}$  is absent when z is a double bond

$R^5$  is selected from the group consisting of

- 1)  $C_{1-6}$  alkyl;
- 2)  $=O$
- 3) aryl
- 4)  $C_{3-10}$  cycloalkyl
- 5)  $C_{1-6}$  alkylene- $C(O)R^{11}$ ;
- 6)  $C_{1-6}$  alkylene- $C(O)R^{13}$
- 7)  $C(O)R^{11}$ ;
- 8)  $C(O)R^{13}$ ;
- 9)  $C(O)OR^{11}$ ;
- 10)  $C(O)OR^{13}$ ;
- 11)  $C(O)N(R^{11}R^{11})$ ;
- 12)  $C(O)N(R^{13}R^{13})$ ;
- 13)  $C(O)N(R^{11}R^{13})$ ;
- 14)  $CN$ ;
- 15)  $NHC(O)R^{11}$ ;
- 16)  $NHC(O)CF_3$ ; and
- 17)  $NHC(O)C_{2-6}$  alkyl;

$R^{11}$  is selected from the group consisting of

- 1) aryl; and
- 2) an unsubstituted or substituted heterocyclic ring consisting of a 4-6 membered unsaturated or saturated monocyclic ring with 1, 2, 3 or 4 heteroatom ring atoms selected from the group consisting N, O and S, and a 9-10-membered unsaturated or saturated bicyclic ring with 1, 2, 3 or 4 heteroatom ring atoms selected from the group consisting of N, O or S; and

$R^{13}$  is selected from the group consisting of

- 1)  $C_{1-6}$  alkyl;
- 2)  $C_{1-6}$  alkylloxy;
- 3)  $C_{1-6}$  alkenyl;

4) C<sub>1-6</sub>alkynyl; and

5) CF<sub>3</sub>;

R<sup>a</sup>, R<sup>b</sup>, R<sup>c</sup>, R<sup>d</sup>, R<sup>e</sup>, R<sup>f</sup>, R<sup>g</sup>, R<sup>h</sup>, R<sup>i</sup>, R<sup>j</sup>, R<sup>k</sup>, and R<sup>l</sup> are independently selected from the group consisting of:

1) hydrogen;

2) C<sub>1-6</sub>alkyl;

3) halogen;

4) aryl;

5) R<sup>80</sup>;

6) C<sub>3-10</sub>cycloalkyl; and

7) OR<sup>4</sup>;

said alkyl, aryl, and cycloalkyl being unsubstituted, monosubstituted with R<sup>7</sup>, disubstituted with R<sup>7</sup> and R<sup>15</sup>, trisubstituted with R<sup>7</sup>, R<sup>15</sup> and R<sup>16</sup>, or tetrasubstituted with R<sup>7</sup>, R<sup>15</sup>, R<sup>16</sup> and R<sup>17</sup>;

R<sup>4</sup>, R<sup>40</sup>, R<sup>41</sup>, R<sup>42</sup>, R<sup>43</sup>, R<sup>44</sup>, R<sup>45</sup>, R<sup>46</sup>, R<sup>47</sup>, R<sup>48</sup>, R<sup>49</sup>, R<sup>51</sup>, and R<sup>52</sup> are independently selected from:

1) hydrogen;

2) C<sub>1-6</sub>alkyl;

3) C<sub>3-10</sub>cycloalkyl;

4) aryl;

5) R<sup>81</sup>;

6) CF<sub>3</sub>;

7) C<sub>2-6</sub>alkenyl; and

8) C<sub>2-6</sub>alkynyl;

said alkyl, aryl, and cycloalkyl is unsubstituted, mono-substituted with R<sup>18</sup>, di-substituted with R<sup>18</sup> and R<sup>19</sup>, tri-substituted with R<sup>18</sup>, R<sup>19</sup> and R<sup>20</sup>, or tetra-substituted with R<sup>18</sup>, R<sup>19</sup>, R<sup>20</sup> and R<sup>21</sup>;

R<sup>6</sup>, R<sup>60</sup>, R<sup>61</sup>, and R<sup>63</sup> are independently selected from:

1) C<sub>1-6</sub>alkyl;

2) aryl;

3) R<sup>83</sup>; and

4) C<sub>3-10</sub>cycloalkyl;

said alkyl, aryl, and cycloalkyl is unsubstituted, mono-substituted with R<sup>26</sup>, di-substituted with R<sup>26</sup> and R<sup>27</sup>, tri-substituted with R<sup>26</sup>, R<sup>27</sup> and R<sup>28</sup>, or tetra-substituted with R<sup>26</sup>, R<sup>27</sup>, R<sup>28</sup> and R<sup>29</sup>;

$R^7$ ,  $R^{15}$ ,  $R^{16}$ ,  $R^{17}$ ,  $R^{18}$ ,  $R^{19}$ ,  $R^{20}$ ,  $R^{21}$ ,  $R^{26}$ ,  $R^{27}$ ,  $R^{28}$ , and  $R^{29}$  are independently selected from:

- 1)  $C_4$ - $C_6$  alkyl;
- 2) halogen;
- 3)  $OR^{51}$ ;
- 4)  $CF_3$ ;
- 5) aryl;
- 6)  $C_3$ - $C_{10}$  cycloalkyl;
- 7)  $R^{84}$ ;
- 8)  $S(O)_0-2N(R^{51}R^{52})$ ;
- 9)  $C(O)OR^{51}$ ;
- 10)  $C(O)R^{51}$ ;
- 11)  $CN$ ;
- 12)  $C(O)N(R^{51}R^{52})$ ;
- 13)  $N(R^{51})C(O)R^{52}$ ;
- 14)  $S(O)_0-2R^{63}$ ;
- 15)  $NO_2$ ; and
- 16)  $N(R^{51}R^{52})$ ;

$R^{80}$ ,  $R^{81}$ ,  $R^{83}$  and  $R^{84}$  are independently selected from a group of unsubstituted or substituted heterocyclic rings consisting of a 4-6 membered unsaturated or saturated monocyclic ring with 1, 2, 3 or 4 heteroatom ring atoms selected from the group consisting N, O and S, and a 9- or 10-membered unsaturated or saturated bicyclic ring with 1, 2, 3 or 4 heteroatom ring atoms selected from the group consisting of N, O or S; and n, p, q, r, and s are independently 0, 1, 2, 3, 4, 5 or 6, provided that, when  $R^9$  is hydrogen, A is substituted as defined above;

and wherein said compound is selected from the group consisting of 7-methoxy-2,3-dimethyl-1-phenyl-2,3-dihydroquinazolin-4(1H)-one; 7-methoxy-2-methyl-4-oxo-1-phenyl-1,4-dihydroquinazolin-1-ium chloride; 2-tert-butyl-7-methoxy-1-phenylquinazolin-4(1H)-one; 2-cyclohexyl-7-methoxy-1-phenylquinazolin-4(1H)-one; and 3-Cyclopropyl-7-methoxy-1-phenylquinazolin-2,4(1H,3H)-dione.

Claim 24 (Previously presented) A pharmaceutical formulation comprising a pharmaceutically acceptable carrier and the compound of Claim 23 or a pharmaceutically acceptable crystal form or hydrate thereof.